ADMINISTRATION REPORT OF MILITARY WORKS

OF THE

PUBLIC WORKS DEPARTMENT,

BOMBAY PRESIDENCY,

FOR THE YEAR

1888-89.

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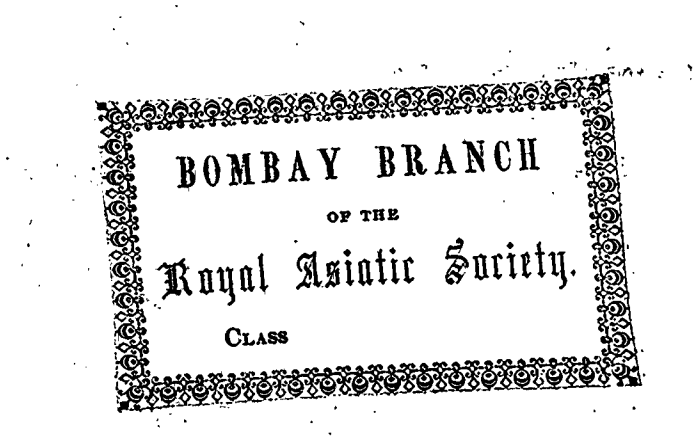
1889.



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ADMINISTRATION REPORT

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PUBLIC WORKS DEPARTMENT,

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MILITARY WORKS.

1. The places within the limits of the Bombay Presidency at which, Bombay Troops are stationed, and the buildings in which are in charge of the Bombay Public Works Department, are as follows:—

Army Division or District.	Name of Station.	Executive District.	Superintending Division.
Northern Division... ...	Ahmedabad ...	Ahmedabad	Chief Engineer, Northern Division.
	Rájkot		
	Bhúj		
	Baroda	Kaira	
	Surat	Surat and Broach ...	
Bombay District	Bombay	Military Works, Bombay.	
	Colába		
	Devláli		
	Thána	Thána	
Poona Division	Poona	Poona and Kirkee ...	Superintending Engineer, Central Division.
	Kirkee		
	Sirúr	Poona District ...	
	Purandhar ...		
	Khandála ...		
	Ahmednagar ...	Ahmednagar	
	Sholápur* ...	Sholápur	
	Málegaon ...	Khándesh	
	Sátára	Sátára...	Chief Engineer, Southern Division.
Sind District	Karáchi... ...	Lower and Central Sind, and Karáchi Defences.	Superintending Engineer in Sind.
	Jacobabad ...	Lower and Central Sind.	
	Ghizri		
	Kotri		
	Jask		
	Hyderabad ...		
	Sui		
	Kashmor ...		
	Toj		
	Goránári ...		
	Sanhri		
	Sukkur* ...	Shikárpur Canals.	
Aden Brigade	Aden	Aden.	Superintending Engineer, West of India Coast Defences.
	Perim		

2. In addition to the foregoing stations, the Bombay Public Works Department has in its charge the buildings in the station of Belgaum in the Southern Division, garrisoned by Madras Troops.

* NOTE.—No troops stationed at these places.

3. The expenditure under the head Military (including Contributions) in 1888-89, amounted to Rs. 13,37,565 of which Rs. 4,64,778 was for Original Works, Rs. 5,02,129 for Repairs, Rs. 2,22,038 for Establishment, Rs. 14,278 for Tools and Plant, and Rs. 1,34,342 for Barrack Department.

4. Following the usual course, the operations of the year are described under the several heads laid down in the regulations for the classification of expenditure on Military Works.

I.—ACCOMMODATION FOR TROOPS.

Buildings for European Troops in the Plains.

Bombay.

5. The two new barracks at Colába were practically completed during the year, at an outlay of Rs. 3,24,237, the expenditure during the year having been Rs. 1,31,411. They consist of two blocks, each of which contains four barrack rooms, two day-rooms, and sergeant's quarters, and will accommodate 4 sergeants and 72 rank and file. They are of stone masonry on arched plinths, with asphalt flooring, and roofs of Mangalore tiles. The floors are supported on iron girders, and the roof on iron trusses. They are provided with lavatories, cook-houses, and privies, connected by a covered way; and water is laid on throughout.

Ghorepuri.

6. Blocks Nos. 200 and 159 of the married men's quarters at the Ghorepuri Barracks were converted into rest houses for single men, in connection with the new permanent rest camp, by constructing arched openings in the partition walls. Block No. 159 was, besides, altered, so as to provide for a sergeant's room, canteen and coffee-shop, by altering the doors and windows, and fixing serving bars in the walls. A shed, 40′ × 20′, of teakwood framing and corrugated iron sheeting, with a muram floor, to be used as a recreation room for the Rest Camp at Ghorepuri, was completed during the year, at a cost of Rs. 1,175. No. 8 Barrack was also converted into a refreshment department for the Regimental Institute, by enclosing portions of the verandahs, so as to form beer stores, coffee stores, and a corporal's room.

7. In connection with the improvement of the sanitary condition of the Ghorepuri Barracks, some alterations have been made to the nála which runs at the back of the Native Infantry Lines. The bed has been deepened and straightened, so as to allow the water to flow off freely.

Poona.

8. A contribution of Rs. 3,000 was made to the Poona Volunteer Corps, to provide quarters for the Sergeant-Instructor of the corps.

Ahmednagar.

9. Three of the patchery blocks in the British Infantry Barracks were converted into barrack rooms to provide extra accommodation; each room will accommodate twenty men. Accommodation for six sergeants is also provided in the end-rooms. The floors, which were originally muramed, have been stone-paved, and the roofs thoroughly repaired and re-tiled. Some of the out-buildings of the old married quarters have been converted into wash-houses and latrines, and fitted with iron water-tanks and distributing pipes, &c. Waste and sullage water masonry drains have also been laid down in rear of each of the patchery barrack rooms. The total cost of all the alterations amounted to Rs. 25,849. Six new detached wash-houses for the European Infantry Lines have been erected between the two lines of barrack rooms, in place of those at the end of each room, and will be completed by the end of May.

Aden.

10. Compensation has been paid for the Roman Catholic Chapel and two bungalows on Chapel Hill, and the site partially cleared for the site for the new Royal Artillery Barracks. The excavation of foundations for the two single men's barracks has been commenced, and nearly completed; materials have been collected on the site, and the iron work for the structure in the above-named two blocks is in hand, in England, for delivery in June. Rupees 50,000 have been expended.

11. Several minor improvements have been made to the European Infantry Canteen, Survey School, and urinaries of the Bombay Sappers and Miners; and also to the European Infantry Canteen at the Isthmus.

Karáchi and Hyderabad.

12. Several small improvements and additions were carried out to the Military buildings at these stations.

Karáchi.

13. A band-stand and lawn tennis court have been constructed in connection with the Regimental Institute in the Napier Lines.

Buildings for Native Troops.

Wanowri.

14. Accommodation, consisting of 1 pendall for 64 single men, and 2 pendalls for 62 single men, each, 2 blocks of quarters for 16 married men each, and 3 native officers' quarters, has been provided for No. 2 Mountain

Battery. The walls are of rubble stone and mud, plastered with clay; the roofs are single-tiled, supported on jungle teak trusses, rafters and bamboo battens; the doors are of junglewood, plain-planked, and the floors are muramed. The cost was Rs. 18,977, against the estimate of Rs. 22,529, and was charged to the hutting grant.

15. Some minor improvements were made at the Rifle Butts for the Native Infantry Lines, which were executed by the Sappers and Miners, and Arsenal Guard. Aden.

2.—ORDNANCE WORKS.

16. The Saluting Battery at Bombay, which was located at the head of the road leading to the Apollo Bandar, has been transferred to a new site on the Apollo Reclamation, immediately to the north of the Government Coal Depôt, with a frontage on the Harbour. The old platform has been removed and re-erected, and a magazine and quarters for lascars constructed, the former of stone and lime masonry, with a concrete arch roof, and the latter of brick-nogging and Mangalore tile roof. The Saw Mill shed in the Gun Carriage Factory, Bombay, has been converted into a painters' shop, at a cost of Rs. 3,222; and the water service in the Arsenal at Bombay is undergoing improvement. The latter work is being carried out by the Municipality, at a cost of Rs. 4,458. Bombay.

17. The Powder Magazine at the Fortified Post, Camp Ahmedabad, has been fitted with racks to contain about 2,914 barrels, or nearly 150 tons of gunpowder. The work was commenced and completed within the year. Ahmedabad.

18. The work of constructing quarters for 28 lascars attached to the Ordnance Depôt at Poona is being carried out by the Ordnance Department. Poona.

19. A paint-shed, 30′ × 20′, at the Gun Carriage Factory, Poona, has been constructed against the east wall of the Smiths' shed.

20. One block of quarters for Warrant Officers of the Small Arms Ammunition Factory at Kirkee, has been completed, and the superstructure of the second block of quarters has been raised to a height of 8 feet. The total expenditure for the year was Rs. 17,504. The quarters are according to standard plan, and will each accommodate two Conductors. Kirkee.

21 The shifting-room, in connection with the Small Arms Ammunition Factory at Kirkee, was nearly completed in 1887-88, and the few minor items, which remained to be done, were executed during the early part of the year.

22. Two temporary wells were sunk in the compound of the Arsenal, and the ground near the Main Magazine was drained. Aden.

23. A loop-holed wall was built along the western and southern side of the Arsenal, and three water tanks within the Arsenal enclosure were constructed. The floors of the workshops were also paved. Karachi.

3.—COMMISSARIAT BUILDINGS.

24. The site occupied by the old Commissariat buildings at Keamari, on the quay, was required urgently by the Port Trust, and the North-Western Railway; the old buildings, with site, were, therefore, given up, and new buildings constructed on an adjacent site. These buildings consist of two open sheds, 180′ × 40′, and four closed sheds, 180′ × 24′, with Agent's quarters, office, &c. The whole area of land acquired by Government, of which only a portion is occupied by the Commissariat buildings, has been fenced in. Karachi

7.—GENERAL CANTONMENT WORKS.

WATER-SUPPLY.

25. Certain small improvements have been carried out to the water supply at Shaik Othman.

26. The old condenser has been replaced by a new one of 6,000 gallons; and the boiler and condenser houses have been adapted to the new plant. Perim.

27. The zareeba at Zaila has been provided with new masonry tanks, for storage of water for supply to troops. The external dimensions of the tank is 35′ 3″ × 31′ 6″ × 10′, and it contains four compartments, 10′ × 8′ × 8′, each holding 4,000 gallons of water. Zaila and Berbera.

Karáchi

28. Pipes were laid for supplying water to the patcherries and bath-rooms of the Napier and Somerset Lines, and to the Station Hospital and Lascars' Lines.

DRAINAGE.

Kaira.

29. Owing to the small allotment (Rs. 3,500), very little progress was made with the drainage of the Baroda Cantonment, which has been fully described in previous reports. It is hoped that the work will shortly be completed.

8.—FORTIFICATIONS.

Bombay.

30. The Special Defence Works have made rapid progress. The batteries generally, both for the Harbour Defence and the Western Defence, are approaching completion. A scheme for arranging for Position-finding stations is being worked out.

31. The extension of the Pier, and construction of a Store-shed and Dry Gun Cotton Magazine at Butcher's Island were completed, with the exception of a few minor fittings.

Karáchi.

32. The Special Defence Works at Manora have been pushed on most vigorously towards completion.

33. As the old light-house and Superintendent's quarters were on the site of No. 1 Battery, as enlarged and remodelled, a new light-house and quarters have been built. The work was commenced in February 1888. The quarters were completed and handed over to the Port Officer's Department in November 1888, and the new light-house on 1st April 1889, on which date the lamps were lighted for the public use. The old quarters have been, and the old light-house is about to be pulled down. The new light-house is situated north of No. 1 Battery, and the light is the same height above sea-level as the old one was. The light is a fixed first-class beam, showing through an arc of 180°. The estimated cost for the Superintendent's quarters and light-house, light, &c., is Rs. 1,07,126.

34. Barracks have been constructed, within No. 1 Battery, for a detachment of Royal Artillery, and are nearly completed.

35. The removal of the old Master Gunner's quarters was necessitated by the extension of No. 1 Battery, and new quarters for a Warrant Officer of that rank have been constructed, at a distance of about 800 yards north of the battery, at a cost of Rs. 8,396.

36. The removal of Deepwater Point and extension of East Groyne has been in progress during the year.

37. A preliminary scheme for Position-finding stations has been drawn up and discussed with the Local Military authorities, and is still under consideration.

Aden.

38. The Special Defence Works, in connection with the protection of this important coaling station, have advanced almost to completion.

39. The construction of a pier for landing the heavy guns was completed, together with a floating pontoon sheers, capable of raising 50 tons.

40. The scheme for the defence of the inner harbour and land side of the peninsula was commenced.

Ahmedabad.

41. The Fortified Post, Camp Ahmedabad, has been fully described in former reports. The work remaining to be completed at the beginning of 1888-89 was in connection with the Fort wall bastions, gate, and drawbridge. All these items have been completed, with the exception of the bastions, which are found to require strengthening, and the necessary additions are now in hand; the work will, it is anticipated, be completed shortly. The estimate for the Fort wall bastions, &c., amounts to Rs. 89,380, and the expenditure to end of the year has been Rs. 79,822.

Ahmednagar.

42. Four of the bastions, on which the guns are mounted in the Fort at Ahmednagar, have been altered to facilitate the working of the guns.

Sátára.

43. In connection with the improvements to the Hill Fort at Sátára, the buildings, *viz.*, guard-room, officers' quarters, and a small arms ammunition magazine, which were in progress last year, were completed during the year, and a Commissariat store was added. The total expenditure on the Hill Fort works, up to the end of 1888-89, amounted to Rs. 15,953, against the estimated cost, Rs. 23,300.

9.—DOCKYARD AND NAVAL BUILDINGS.

Bombay.

44. The double-storeyed godown, 262′ × 36′, in Her Majesty's Dockyard, Bombay, was commenced during the year, and the walling finished to level of first floor. The iron columns and girders were provided, and the building will be completed very shortly.

45. The floor of the Pay and Muster Room has been paved with stone slabs set in lime mortar, over a bed of concrete, at a cost of Rs. 2,863. The sanctioned estimate amounted to Rs. 3,127.

46. New racks, for the purpose of storing provisions, have been put up in one of the godowns, so as to free the victualling godown, which has been converted into one for the storage of iron, steel, &c., by altering the arrangement of the racks.

47. The rubble masonry and teak sleepers, which composed the floor of the old Bombay Dock, have been removed, and stone pavement, 3″ thick, (over lime concrete 6″ thick), pointed with Portland cement, has been substituted, and the teakwood sleepers have been renewed.

48. A new roof of corrugated iron to the Boiler-house in the Dockyard was provided in place of the old one of single tiles.

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